

IN THE ABSTRACT

Please replace the Abstract with the following new Abstract:

A power supply and method of operating the same. The method includes the steps of: operating first and second switches to an “On” position; operating said first switch to a “Off” position, causing a flow of a first free-wheeling current through a first free-wheeling current path; measuring a value of said free-wheeling current; controlling the switching of said second switch responsive to said value of said free-wheeling current; and regulating power from said power supply unit. The power supply includes: an inductive converter; a first free-wheeling current path comprising: a first switch connected in series with said inductive converter and a first means for measuring a first free-wheeling current flowing through said first free-wheeling current path; and a second free-wheeling current path comprising: a second switch connected in series with said inductive converter and a second means for measuring a second free-wheeling current flowing through said second free-wheeling current path.